

### **REMARKS**

Applicants have carefully reviewed the Office Action dated May 30, 2008. In the specification, paragraphs [0017], [0023] and [0026] have been amended to correct minor typographical errors. The Abstract has been amended to correct minor typographical errors.

Applicants have amended Claim 1 to more clearly point out the present inventive concept. Reconsideration and favorable action is respectfully requested.

Claims 1, 2, 4-8 and 10-15 stand rejected under 35 U.S.C. § 102(a) as being anticipated by *Lange et al.*, U.S. Patent No. 6,751,499. This rejection is respectfully traversed with respect to the claims as currently presented.

Applicants' present invention, as defined by the claims as currently presented, is directed toward a system for providing a model that can be utilized in determining the wellness of that particular individual. First, the claim is restricted for a model of a particular and "given" human body of a person. The reason that this is restricted as such is that a person, in and of themselves, is considered to be a unique physiological system. Although most physiological systems, such as various organ systems and the such are similar, they are different. Further, it is very difficult to actually monitor the entire operation of any physiological system in realtime or even access the various parameters of that system. All that can be done is to measure external parameters such as blood pressure, temperature, blood sugar levels, etc. However, a person's wellness in response to the operation of various physiological systems is a perceived wellness sometimes. Thus, the way the person's brain interacts with their own physiological system will differ from one person to another. Therefore, when certain parameters or historical data from an individual are combined with that person's "subjective" perception of how they feel at the time, a model of that individual can be generated. Once the model is generated, a complete set of data is not then required to at a later time determine any aspect of that individual's wellness.

In accordance with the claims, there are a number of aspects that are provided. First, for that given human body, certain physiological parameters are measured. These are such things, as

set forth in the specification, blood pressure, temperature, blood sugar levels, etc. This could even include an EKG or the such. Then, there is the step of determining “perceived” physiological parameters of the “given” human body through an interface with the human brain. This interface, of course, is basically asking questions to the individual, as that is basically the way to interface with the human brain. One cannot determine how the brain perceives that human’s wellness, but communication with the individual can determine whether they feel well or the such. Thus, it is necessary to determine what the perception or the subjective interpretation of a person’s body is. Thus, the sensed measured parameters and the perceived parameters then comprise an input vector to a model. The model then processes this vector of information and this model is trained on a training set of data comprising historical measured physiological parameters of the “given” body over time in conjunction with historical perceived physiological parameters of the “given” body. Of course, this training data set would be much larger than the input to the model of the measured parameters and the perceived parameters at any particular time. This would then provide some measure of wellness to that human within the current window of time. Thus, by processing both measured and perceived data relative to that given body and processing them for a model of that body, wellness can be determined.

The cited reference to *Lange* is not believed to rise to the level of a Section 102 reference because *Lange* is directed toward providing a system that will measure pain. The primary purpose for this system is to provide a pain measurement system that can detect pain level from what is determined as “perceived” pain measurements and using these pain measurements to provide, for example, a closed-loop analgesia application system. However, the term “perceived” as used in this reference is one of measuring certain parameters of the physiological system and using these measurements to correlate to what is the subjected pain level-objective data. There are correlations done between the actual (objective) pain measurement and the subjective aspect. However, these are by way of studies. These studies were done for no other reason than to provide a correlation between the pain measurement system (which is a generalized pain measurement system for a general human metabolic system) and there is no indication that these are used to provide a model; rather, all they do is validate that the pain measurements correspond to what subjectively an average group of people would consider to be pain. This would provide a confidence value in the actual measurement. However, this is

nothing more than a pain measurement system that utilizes an electrical connection to various points on the human's skin, such as the points on the forehead, which can be used to provide an electrical indication of pain. For example, in the background of the invention, one of the objectives or problems to solve is to account for the problem wherein there must be an objective assessment of pain made (col. 1, lines 27-31) where a patient is not fully communicative. This uses such things as verbal scales where people rate their own pain as mild, moderate, severe or even in a range of 0-10. Further, at col. 2, line 54, it is noted that the various devices known as Patient Controlled Analgesia (PCA) devices, cannot be readily used, one problem being noted is that they are difficult to normalize with respect to a patient's self-assessment, since they rely on subjective psychological factors. Further, one of the problems with these systems is that self-assessment is considered to lead to inconsistent treatment between different patient types. Thus, the entire object of this invention is to provide an objective pain measurement device generalized over many people.

There is no disclosure in *Lange* that shows a model that is modeled on given human body wherein that model is the mapping of an input to an output across the representation of a given human body wherein the input comprises measured parameters and perceived parameters of that human body, i.e., these parameters that were measured, were measured directly on the body and the perceived parameters were those perceived by that particular individual of their own body. This model is not valid for another human. As such, *Lange* must disclose some type of model of the individual wherein that model is trained on both of these parameters for this to be a relevant reference. Further, the model must have as an input the perceived parameters as well as the measured parameters. *Lange* only provides the objective measured parameters when running the system.

In view of the above, Applicants believe that *Lange* does not disclose all of the elements of the invention as claimed with respect to Claim 1 nor does it suggest such. Therefore, Applicants believe that *Lange* neither anticipates nor obviates Applicants' present inventive concept, as defined by the currently presented claims and, therefore, Applicants respectfully request withdrawal of the 35 U.S.C. § 102 rejection with respect to the claims currently pending in this application.

Applicants have now made an earnest attempt in order to place this case in condition for allowance. For the reasons stated above, Applicants respectfully request full allowance of the claims as amended. Please charge any additional fees or deficiencies in fees or credit any overpayment to Deposit Account No. 20-0780/MAGN-26,326 of HOWISON & ARNOTT, L.L.P.

Respectfully submitted,  
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